

AMENDMENTS TO THE CLAIMS:

Please cancel claims 8 and 9, without prejudice. Kindly amend claims 7 and 10, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (previously presented): A method of manufacturing a semiconductor device comprising the steps of:

forming a first insulating film on a semiconductor substrate;

forming a first trench in said first insulating film;

forming a second insulating film over the entire surface of said semiconductor substrate so as to fill up said first trench;

forming a plurality of second trenches in an area excluding a region immediately above said first trench portion by removing said second insulating film selectively;

forming a metal film so as to fill in said second trenches;

forming a plurality of wirings by removing said metal film lying outside said second trenches;

forming a third trench by removing said second insulating film lying above said first trench and said second insulating film lying in said trench; and

forming a third insulating film over the entire surface of said semiconductor substrate so as to form a cavity within said third trench to form an air gap.

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Claim 2 (previously presented): The method according to claim 1, wherein said step of forming a third trench to form an air gap comprises removing said second insulating film throughout the whole region between said wirings.

Claim 3 (previously presented): The method according to claim 1:

wherein said step of forming a first trench comprises forming a via hole together with said first trench, in a region of said first insulating film other than the region where said first trench is formed,

said step of forming a plurality of second trenches comprises connecting said second trenches to said via holes, and

said step of forming a metal film comprises filling it in said via holes together with said second trenches.

Claim 4 (previously presented): The method according to claim 1, wherein said step of forming a third trench comprises removing said second insulating film along the region where said first trench is formed.

Claim 5 (previously presented): The method according to claim 1, wherein said step of forming a third trench comprises removing said second insulating film, by using an etchant capable of removing said insulating film selectively with respect to said metal film without using a mask.

Claim 6 (original): The method according to claim 1, wherein said third insulating film is made of a low-dielectric-constant material.

Claim 7 (currently amended): A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film on a semiconductor substrate;

forming a plurality of first trenches for wirings by removing said insulating film selectively;

forming a metal film so as to fill in said first trenches for wirings;

forming a plurality of wirings by removing said metal film lying outside said first trenches for wirings; [[and]]

forming a second trench by removing said insulating film throughout the whole region between said wirings; and

forming an interlayer insulating film over the entire surface of said semiconductor substrate after the step of forming said second trench,

wherein said step of forming an interlayer insulating film comprises forming a cavity within said second trench.

Claim 8 (cancelled)

Claim 9 (cancelled)

Claim 10 (currently amended): ~~The method according to claim 8,~~ A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film on a semiconductor substrate;

forming a plurality of first trenches for wirings by removing said insulating film selectively;

forming a metal film so as to fill in said first trenches for wirings;

forming a plurality of wirings by removing said metal film lying outside said first trenches for wirings;

forming a second trench by removing said insulating film throughout the whole region between said wirings; and

forming an interlayer insulating film over the entire surface of said semiconductor substrate after the step of forming said second trench,

wherein said interlayer insulating film is made of a low-dielectric-constant material.

Claim 11 (previously presented): The method according to claim 7, wherein said step of forming a second trench comprises removing said insulating film by using an etchant capable of removing said insulating film selectively with respect to said metal film without using a mask.

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